**January 2011 Exam Outcome Review: What You Need to Know.**

The exam is divided into three sections: A) Multiple Choice (Value 30)

B) Short Answer (Value 55)

C) Word Problems (Value 15)

.

REVIEW:

* Fractions - comparing, ordering, add/subtract/multiply/divide, change to decimal (or change decimal to fraction)
* Integers - comparing, ordering, add/subtract/multiply/divide
* Order of Operations (BEDMAS) – with fractions or integers

**Concentrated Areas to Study:**

**UNIT 3 – RATIONAL NUMBERS**

* Definition, give examples in decimal and fraction form
* Comparing and ordering (i.e., on number line) – decimal and/or fraction form
* Add/subtract/multiply/divide – decimal and/or fraction form
* Order of operations – decimal and/or fraction form

Page 143 Study Guide

Page 121 # 2, 3, 6, 8, 9

Page 144 #5, 6, 7, 8, 10, 12

Page 145 # 14, 19, 23

**UNIT 1 – SQUARE ROOTS / PYTHAGORAS THEOREM**

* Perfect squares – in fraction and decimal form, find square roots
* Non-perfect squares – in fraction or decimal form, estimate square roots
* Find length of unknown side in right triangle (hypotenuse OR other leg) using Pythagorean Theorem

Page 44 Study Guide

Page 21 # 2, 3, 5, 7, 8, 9

Page 48 # 1, 2, 4

**UNIT 2 – POWERS AND EXPONENT LAWS**

* Write powers as repeated multiplication, remembering that negative inside brackets can make the answer different than if the negative is outside brackets
* Exponent laws – zero exponent, product of powers, quotient of powers, power of a power, power of a product, power of a quotient

Page 86 Study Guide

Page 69 #2, 5, 6, 7, 8

Page 87 #3, 6, 10

Page 88 #13, 14

Page 89 #20, 26, 27

Page 90 # 2, 3, 7, 8

**UNIT 5 – POLYNOMIALS**

* Definitions – term, polynomial, trinomial, binomial, monomial, constant, degree, coefficient
* Represent polynomials with algebra tiles
* Add like terms
* Add/subtract polynomials (with or without algebra tiles)
* Multiply/Divide polynomial by a constant
* Multiply/Divide polynomial by a monomial

Page 258 Study Guide

Page 237 #1, 3, 10, 11

Page 259 #1, 6, 10

Page 260 #12, 15, 19, 20

Page 261 #22, 24, 26, 27, 28

Page 262 # 1, 2, 5, 6, 8

**UNIT 1 – SURFACE AREA**

* Area of square, rectangle, triangle, circle
* Surface area of right rectangular prism, right triangular prism, cylinder
* Surface area of composite objects (sum of surface area of objects, minus the overlap area)

Page 44 Study Guide

Page 46 #15, 16

Page 47 #19

Page 48 #5, 6